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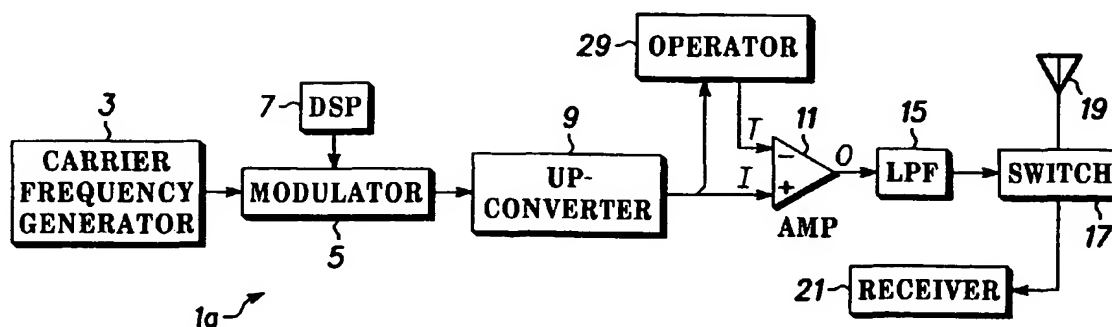
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(54) Title: AMPLIFIER CIRCUITS AND THEIR USE IN RADIO FREQUENCY TRANSMITTERS



(57) Abstract: An RF Amplifier circuit comprises an RF amplifying device having a first input terminal, a second input terminal and an output terminal, means for applying to the first input terminal an input FR signal I to be amplified, means for applying to the second input terminal a threshold signal T, and the amplifying device being operable to produce at the output terminal an output signal O which has a high finite value providing a Boolean '1' value when the instantaneous value of the amplitude of I is greater than T and a low finite value providing a Boolean '0' value when the instantaneous value of the amplitude of I is less than T, wherein the threshold signal is dynamically varied in a manner adapted to linearise the relationship in at least part of its range between the amplitude of the output part of its range between the amplitude of the output signal O and the amplitude of the input signal I. The amplifier circuit beneficially can provide a combination of linearity and high efficiency and is suitable for use in power amplifiers for RF communications and other applications.